**Escherichia coli, Strain H414-36/89**

Catalog No. NR-97  
(Derived from ATCC® 51434™)

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**Contributor:**  
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**Product Description:**  
**Bacteria Classification:** Enterobacteriaceae, Escherichia  
**Agent:** Escherichia coli (E. coli)  
**Strain:** H414-36/89  
**Serotype:** O91:H21  
**Original Source:** Patient with hemorrhagic colitis

E. coli is a gram-negative, rod-shaped bacterium which occurs singly or in pairs. It is a major facultative inhabitant of the large intestine.

The enterohemorrhagic E. coli (EHEC) strain H414-36/89 was isolated from a patient with hemorrhagic colitis in Germany.1 E. coli H414-36/89 and many other EHEC strains encode potent toxins, similar to those of Shigella dysenteriae, which can cause severe intestinal, kidney and central nervous system disease. The large plasmid of E. coli H414-36/89 carries one copy of the gene for Shiga-like toxin type II (SLT-II) and two copies of the gene for an SLT-II-variant-type toxin.2,3 E. coli H414-36/89 has been shown to be highly virulent in a mouse model of infection.4

**Material Provided:**  
Each vial contains approximately 0.5 mL of bacterial culture in 0.5X Tryptic Soy Broth supplemented with 10% glycerol.

**Packaging/Storage:**  
NR-97 was packaged aseptically, in screw-capped plastic cryovials. The product is provided frozen and should be stored at -60°C or colder immediately upon arrival. For long-term storage, the vapor phase of a liquid nitrogen freezer is recommended. Freeze-thaw cycles should be avoided.

**Growth Conditions:**  
**Media:**  
Tryptic Soy Broth or equivalent  
Tryptic Soy Agar or equivalent  
**Incubation:**  
Temperature: 37°C  
Atmosphere: Aerobic

**Propagation:**  
1. Keep vial frozen until ready for use; then thaw.

2. Transfer the entire thawed aliquot into a single tube of Tryptic Soy Broth.

3. Use several drops of the suspension to inoculate a Tryptic Soy Agar slant and/or plate.

4. Incubate the slant and/or plate at 37°C for 24 hours.

**Citation:**  
Acknowledgment for publications should read “The following reagent was obtained through the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH: Escherichia coli, Strain H414-36/89, NR-97.”

**Biosafety Level:**  
2


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References:


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